JOURNAL OF MOLECULAR CATALYSIS VOL. 76 Nos. 1–3, OCTOBER 15 1992

Contents

The aqueous ring-opening metathesis polymerization of 7-oxa-norbornene-2,3-dicarboxylic acid dimethyl ester and norbornene with Ru catalysts 1
E. Zenkl and F. Stelzer (Graz, Austria)

Synthesis of functional polymers via borane monomers and metathesis catalysts 15
T. C. Chung (University Park, PA, USA)

The olefin metathesis reaction — a versatile tool for fine organic synthesis 33
E. Sh. Finkel'shtein, V. I. Bykov and E. B. Portnykh (Moscow, Russia)

Transition metal catalyzed metathesis polymerizations of partially fluorinated norbornene derivatives..... 53
N. Seehof, Ch. Mehler, S. Breunig and W. Risse (Marburg, Germany)

Ring-opening polymerization of cycloolefins by tungsten(VI) chloride–acetylene catalyst systems 65
K. L. Makovetsky, L. I. Gorbacheva, I. Ya. Ostrovskaya, A. I. Golberg, A. I. Mikaya, A. A. Zakharian and M. P. Filatova (Moscow, Russia)

Relationship between structure and stereoselectivity in ring-opening metathesis polymerization catalytic systems 79
M. Dimonie, S. Coca and V. Drăguţan (Bucharest, Romania)

Metathesis and cross-metathesis of 5-acetoxy- or 5-cyanonorbornene..... 93
E. Thorn-Csányi, Ch. Harder and B. Dahlke (Hamburg, Germany)

Ring-opening metathesis polymerization of [2.2]paracyclophane-1,9-diene (PCPDE) to poly(*p*-phenylene-vinylene) (PPV) and copolymers with cyclopentene..... 101
E. Thorn-Csányi and H.-D. Höhnk (Hamburg, Germany)

Ring-opening metathesis polymerization of substituted norbornenes..... 107
K. L. Makovetsky, E. Sh. Finkel'shtein, I. Ya. Ostrovskaya, E. B. Portnykh, L. I. Gorbacheva, A. I. Golberg, N. V. Ushakov and Yu. P. Yampolsky (Moscow, Russia)

Ruthenium-catalysed ring-opening metathesis polymerization of cycloolefins initiated by diazoesters 123
A. Demonceau, A. F. Noels, E. Saive and A. J. Hubert (Liège, Belgium)

Metathesis of silicon-containing olefins..... 133
E. Sh. Finkel'shtein, N. V. Ushakov and E. B. Portnykh (Moscow, Russia)

Molecular mechanics studies on the stereoselectivity of $WCl_6/SnMe_4$-catalyzed ring-opening polymerization of norbornene..... 145
L. Bencze and R. Szilagyi (Veszprém, Hungary)

Dimetallacyclobutadiene derivatives: Catalysts or catalyst precursors for the ROMP of norbornene?..... 157
N. W. Eilerts, J. A. Heppert and M. D. Morton (Lawrence, KS, USA)

Aryloxide derivatives of tungsten oxytetrachloride as ring-opening metathesis polymerization catalysts..... 165
A. Bell (Wilmington, DE, USA)

Metathesis of functionalized olefins with WCl_6– (or $WOCl_4$–) 1,1,3,3-tetramethyl-1,3-disilacyclobutane catalyst 181
N. B. Bespalova and M. A. Bovina (Moscow, Russia)

Elsevier Sequoia

Chiral polymers via cyclopolymerization 189
G. W. Coates and R. M. Waymouth (Stanford, CA, USA)

Behaviour of ethylene homopolymerization and ethylene–1-butene copolymerization with $SiO_2/MgCl_2$ bisupported titanium catalyst 195
S. Xiao and H. Lu (Beijing, China)

NMR studies on the mechanism of polymerization of cyclic olefins by a molybdenum catalyst 209
J. A. Johnston, P. L. Rinaldi and M. F. Farona (Akron, OH, USA)

Pd^{2+} catalyzed addition polymerizations of norbornene and norbornene derivatives 219
N. Seehof, Ch. Mehler, S. Breunig and W. Risse (Marburg, Germany)

Progress toward new catalysts for acyclic diene metathesis (ADMET) polymerization reactions 229
L. L. Blosch, A. S. Gamble and J. M. Boncella (Gainesville, FL, USA)

Modified poly(butadiene-*alt*-propene) investigated by means of metathesis degradation 239
K. Hummel, N. Kiattanavith, K. Martl and Ch. Mirtl (Graz, Austria)

Isomerization and metathesis of 2-methyl-1-alkenes over Re_2O_7–Al_2O_3 catalysts 249
T. Kawai, T. Okada and T. Ishikawa (Tokyo, Japan)

Structural determination of surface rhenium oxide on various oxide supports (Al_2O_3, ZrO_2, TiO_2 and SiO_2) 263
M. A. Vuurman, D. J. Stufkens, A. Oskam (Amsterdam, Netherlands) and I. E. Wachs (Bethlehem, PA, USA)

A surface organometallic approach to the synthesis of rhenium-based catalysts for the metathesis of olefins: CH_3ReO_3/Nb_2O_5 287
R. Buffon, A. Auroux, F. Lefebvre, M. Leconte, A. Choplin, J.-M. Basset (Villeurbanne, France) and W. A. Herrmann (Garching, Germany)

On the structure of the oxide form of Re_2O_7/Al_2O_3 and Re_2O_7/MgO catalysts. . . . 297
R. M. Edreva-Kardjieva (Sofia, Bulgaria), M. A. Vuurman and J. C. Mol (Amsterdam, Netherlands)

Effect of substituents on silicon on cross-metathesis of vinylsilanes with 1-alkenes in the presence of ruthenium complexes 307
B. Marciniec, C. Pietraszuk and Z. Foltynowicz (Poznań, Poland)

Tungsten carbonyl precursors in catalyzed olefin metathesis
Part V. The $XW(CO)_3\pi$-C_5H_5 (X = Cl, I)/R_nSnCl_{4-n} (R = Me, Ph, n = 0–4) precursor combination 319
L. Verdonck, A. R. Bossuyt, A. Praet, F. Verpoort, J. Geeraert, D. Van de Vondel and G. P. Van der Kelen (Ghent, Belgium)

Metathesis polymerization of t-butylacetylene 327
Liu Hezhong, Sun Qunxing, Li Decai, Yuan Huaxian, Zhou Minquan and Guo Xiexian (Dalian, China)

Metathetical polymerisation of alkynes with (arene)$M(CO)_3$ complexes (M = Cr, Mo or W; arene = toluene, *o*-xylene or mesitylene) by electron-transfer-chain catalysis 335
S. Ganesamoorthy and G. Sundararajan (Madras, India)

Ethenolysis of methyl oleate over supported Re-based catalysts. 345
M. Sibeijn and J. C. Mol (Amsterdam, Netherlands)

Economic and ecological aspects in applied olefin metathesis 359
R. Streck (Marl, Germany)

Transesterification products from the metathesis reaction of palm oil 373
M. A. Yarmo, A. Alimuniar, R. A. Ghani, A. R. Sulaiman, M. Ghani, H. Omar and A. Malek (Selangor, Malaysia)

Dimerisation in parallel to metathesis catalysis 381
A. Subramaniam, P. A. Sermon and S. Stevenson (Uxbridge, UK)

Author Index 387

Subject Index 389

The scopes of the Elsevier publications *Applied Catalysis* and *Journal of Molecular Catalysis* being complementary, the Editors wish to help the authors submit their papers to the appropriate place. The guidelines are as follows.

Papers dealing with the following subjects should be directed to *Journal of Molecular Catalysis*: catalytic mechanism of reactions at the molecular level, in homogeneous, enzymatic and heterogeneous reactions; mechanistic studies on model heterogeneous catalysts; preparation of catalysts, when dealing with the intervention of organic or organometallic reactions (*e.g.* insolubilized organometallic complexes and enzymes), new reactions in homogeneous and enzymatic catalysis, even if the mechanism is not elucidated.

Papers dealing with the topics listed below should be directed to *Applied Catalysis*: reactions of industrial interest; deactivation; chemical engineering; preparation of heterogeneous catalysts, when dealing with solid state chemistry and colloidal chemistry; new heterogeneously catalysed reactions of potential interest for applications.

In the case of papers at the borderline, the Editors of *Journal of Molecular Catalysis* and *Applied Catalysis*, in the frame of the coordination between the journals, might be led to suggest to the authors to which journal they could preferably submit their paper.